

Red Fox Farms Fungi

So you have some time on your hands!

Let's grow mushrooms.

We are living in strange and unprecedented times right now and we here at the farm are hoping to help you with a fun project to keep busy and positive while you're staying home.

The idea of growing your own mushrooms can seem mysterious and complicated. Don't be intimidated. Once you know the basics growing your own edible mushrooms is just like growing any other fruit or vegetable.

The kit you received is a variety of oyster mushrooms. The specific species and date the kit was inoculated in the lab is on the back of the box. Oyster mushrooms are the easiest variety for beginners to grow and are hugely popular in Asian countries for daily cooking.

Before I start talking about how to grow mushrooms, it's important to first understand the growing cycle of a mushroom. When most people think of mushrooms, they are only aware of the stem and cap that appear. Not many realize everything that goes into creating the mushrooms. This includes a complex network of mycelium that is often much larger than the mushrooms you see on the surface. Mycelium is a network of cells that resemble a plant root system. However, mycelium is actually more like the plant and mushrooms are just its fruit. The mycelium has one goal, to grow mushrooms to keep the species alive. In the wild a mature mushroom will release spores just like a tree would drop seeds. Those spores mix with others and form mycelium. That mycelium grows either in the soil or on a tree and will start to produce bumps called pin heads. These pin heads develop into little baby mushrooms called primordia. And eventually those primordia develop into fully grown mushrooms, who release their spores, and the whole process begins again.

So what does this have to do with your grow at home kit?

Red Fox Farms Fungi is a craft mushroom farmer but really we are just recreating this exact life cycle in a controlled growing environment with optimum conditions. Inside your grow at home kit you will find a heat sealed grow bag with rehydrated hardwood sawdust "soil" and mushroom mycelium inside it. We've done all the tricky lab parts, and have grown out the mycelium on grain to act as a "seed" in order for us to inoculate all of our bags on a commercial scale. We sterilized the growing media in the bag before we introduced the seed creating the perfect growing conditions for the mycelium.

Normally when we sell our kits we aim to have them nearly ready to fruit by the time you get it. But these are different times, you are all home doing your part to keep our communities safe, and have some spare time! So we encourage you to watch the whole cycle instead.

1. When your kit arrives remove the grow bag from the box. You will notice a hepa filter on the bag. That is because the mycelium needs fresh air exchange. Place your grow bag in a warm area of your house with indirect sunlight. You don't want it too hot as you will notice the mycelium creates its own heat while growing in the bag. Just a cozy place around 20-24 degrees.
2. Within days you will notice white spots growing in the bag. That is the mycelium leaping off the grain seed and beginning to consume the food in the grow bag! This is exactly how we do it on the farm, just in much bigger bags, and on a larger scale.
3. The mycelium can take anywhere from 5-20 days to completely consume all the food in the bag. You may see condensation which is totally normal. At this stage you should watch out for mold. Because we have created optimum growing conditions, if even the tiniest competing species made its way inside the bag, it will compete with the mycelium for the food. Mold is the natural predator of a mushroom farm and is completely normal. Unfortunately, molds excrete an enzyme that will stop mycelium from growing. So if you see something funky let us know, we will happily replace the bag, heck you could have two science experiments with the kids!
4. Once you can no longer see patches of soil in the bag the mycelium has completely consumed its food source and is ready to start growing mushrooms. You may even see pin heads in the bag already. Now is the fun part! Make a long slice in the bag with a sharp knife being careful not to damage the mycelium. Mist the area at least once daily to keep the mycelium from drying out. At this stage it is very similar to growing an orchid. It does need light and water, just does not like direct sunlight or being over watered, don't be intimidated. I happily answer DM's to coach anyone if needed!
5. Because Alberta is still so dry this time of year you may want to make a little humidity tent for your grow block. This can be done with a clear plastic bag placed over the area that you have cut. Just be sure to make plenty of air holes in the bag. Mushrooms need lots of air exchange to be healthy and happy.
6. Continue misting daily and watch your mushrooms grow!
7. Once you have a big mature cluster harvest your mushrooms and enjoy! They usually last 7-10 days in the fridge. You can also dry them for use later....get creative!

Your mushroom block will continue growing until the mycelium has used up all of its energy. We always fruit our grow blocks twice on the farm. As soon as we harvest our mushroom, we fold the bag over the original cut, and cut the opposite side of the bag. We continue the same process and get a second fruiting. The grow block also makes excellent fertilizer for your garden, so don't throw it away!

We look forward to seeing all the mushroom fun you have so please tag us on social media. Some ideas are to time lapse the grow block, make spore prints on dark coloured paper, create a crossword puzzle. And of course, try them in your favourite recipes!

Stay healthy and keep up the great work. See you all at the market soon.

Janine and Brad